

Health Science Education
Diagnostics Medicine
Course Code # 5511

1 Credit

School Year _____

Term: _____ **Fall** _____ **Spring**

Rate each student on the following

- 3 – Mastered (Can work independently with no supervision)
- 2 – Require supervision (Can perform with limited supervision)
- 1 – Not mastered (Requires instructions and close supervision)
- N – No exposure (No experience or knowledge in this area)

Student: _____ Grade _____
Teacher: _____ School _____
Number of Competencies in Course: 63
Number of Competencies Mastered: _____
Percent of Competencies Mastered: _____

Standard 1.0 Students will interpret an imaging diagnostic request, select appropriate equipment, and identify basic anatomy on the resulting images.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)				Mastery	Non-Mastery
1.1	Evaluate the request for services, reporting inconsistencies in the patient's history.					3	2	1	N		
1.2	Match resources/image system with diagnostic needs.					3	2	1	N		
1.3	Demonstrate the role of the professional in each stage of the imaging chain.					3	2	1	N		
1.4	Apply patient and personnel radiation protection where appropriate.					3	2	1	N		
1.5	Prepare the imaging unit for an imaging procedure.					3	2	1	N		
1.6	Evaluate the resulting diagnostic image for quality.					3	2	1	N		
1.7	Identify basic anatomy on medical images, static, and fluoroscopic videos.					3	2	1	N		

Standard 2.0 Students will know and apply various communication methods to give, obtain and transmit information, and evaluate the use of tele-health care in the delivery of health care in clinical and home setting.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)				Mastery	Non-Mastery
2.1	Determine provider's ability to understand and respond to client's concerns and fears.					3	2	1	N		
2.2	Put into practice the use of technology to deliver tele-health care.					3	2	1	N		
2.3	Analyze data received via tele-health.					3	2	1	N		
2.4	Apply diagnostic principles and technology to deliver health care via tele-health.					3	2	1	N		
2.5	Use language appropriate to the situation, reassuring and informing the client of what to expect.					3	2	1	N		
2.6	Use facility guidelines for giving health care information.					3	2	1	N		
2.7	Respect client's cultural differences.					3	2	1	N		
2.8	Transmit diagnosis electronically or manually to client records or referring professionals.					3	2	1	N		
2.9	Document and report information about changes in conditions that might introduce risks to clients or staff.					3	2	1	N		

Standard 3.0 Students will distinguish between sinus, atrial, and ventricular rhythms and assess cardiac output and tissue perfusion.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)				Mastery	Non-Mastery
3.1	Sketch gross heart anatomy and the related cardiac conduction pathways.					3	2	1	N		
3.2	Analyze four lead cardiac rhythm strips and differentiate between critical and non-critical sinus, atria and ventricular dysrhythms.					3	2	1	N		
3.3	Assess cardiac output and tissue perfusion using a pulse oximeter and/or capillary refill.					3	2	1	N		

Standard 4.0 The student will perform an electrocardiogram and an electromyogram and evaluate the results.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)				Mastery	Non-Mastery
4.1	Sketch lead placements as they relate to topographical anatomy.					3	2	1	N		
4.2	Prepare client mentally and physically for the procedures.					3	2	1	N		
4.3	Perform the procedures using proper equipment and technique.					3	2	1	N		

4.4	Analyze and report results as appropriate.	3	2	1	N		
4.5	Restore equipment to original state, i.e., calibration, storage.	3	2	1	N		

Standard 5.0 The student will collect, label, and process artificial samples of body fluids and tissues for laboratory assessment and analyze results.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)	Mastery	Non-Mastery
5.1	Demonstrate the steps in obtaining and labeling venous and capillary blood samples for laboratory, diagnostics, or on laboratory models.	3	2	1	N			
5.2	Simulate specimen collection and processing for over-the-counter screening test (example: blood glucose or strep test).	3	2	1	N			
5.3	Collect, measure, and test artificial samples of urine using reagent strips and gross analysis.	3	2	1	N			
5.4	Relate laboratory data to specific disease processes.	3	2	1	N			
5.5	Describe a quality assurance plan for a laboratory.	3	2	1	N			
5.6	Identify basic anatomy of the renal system.	3	2	1	N			
5.7	Research clinical applications for new products.	3	2	1	N			

Standard 6.0 Students will interpret an optical prescription, select the equipment, and initiate the procedure for obtaining corrective lenses.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)	Mastery	Non-Mastery
6.1	Differentiate between normal and abnormal anatomy of the eye.	3	2	1	N			
6.2	Analyze equipment used in the optical lab to diagnose diseases of the eye.	3	2	1	N			
6.3	Formulate an appropriate eye wear product and complete the order form for a client according to facility guidelines.	3	2	1	N			
6.4	Observe a lensometer to obtain a prescription for validation and quality control.	3	2	1	N			
6.5	Assess post prescription vision and give instructions for care of eyewear product.	3	2	1	N			

Standard 7.0 The student will be aware of the existing and potential hazards to clients, co-workers, and self; prevention of injury or illness through safe work practices, and adherence to health and safety policies and procedures.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)	Mastery	Non-Mastery
7.1	Use standard precautions and OSHA Standards to control the spread of infection.	3	2	1	N			
7.2	Prevent fire and electrical hazard.	3	2	1	N			
7.3	Manage materials safely, following emergency procedures, protocols, and procedures to reduce waste and contain costs.	3	2	1	N			
7.4	Use equipment safely.	3	2	1	N			
7.5	Analyze equipment performance to standards by performing quality control tests.	3	2	1	N			

Standard 8.0 The student will maintain client comfort, monitor and assess client status, and report results to the treatment team while safely performing diagnostic studies.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)	Mastery	Non-Mastery
8.1	Measure and report client vital signs or other indications of health status.	3	2	1	N			
8.2	Record client health status according to facility protocol.	3	2	1	N			
8.3	Assist in determining the need for follow-up or alternative care.	3	2	1	N			
8.4	Observe ways to maintain patient airway and IV fluid maintenance during diagnostic procedures.	3	2	1	N			
8.5	Position client to ensure comfort, using appropriate transport or transfer equipment.	3	2	1	N			

Standard 9.0 The student will examine the range of diagnostic services and the professionals who provide those services and clinical laboratory professionals.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)	Mastery	Non-Mastery
9.1	Compare the role and academic requirements to practice in the diagnostic areas of radiography, nuclear medicine, and ultrasonography.	3	2	1	N			
9.2	Compare the diagnostic roles of medical technology, clinical laboratory sciences, and subspecialties and settings for employment.	3	2	1	N			
9.3	Compare the educational requirement, certification, and licensures for performing ECG, EKG, telemetry and vision care professions.	3	2	1	N			

9.4	Compare the continuing professional development requirements for the various diagnostic professions.	3	2	1	N		
9.5	Operate within medical legal requirements for diagnostic careers.	3	2	1	N		

Standard 10.0 The student will perform classroom laboratory activities and apply knowledge and skills in a health care diagnostic clinical setting.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)	Mastery	Non-Mastery
10.1	Read, interpret, verbalize, and apply policies and procedures appropriate to the health care setting.	3	2	1	N			
10.2	Participate in a health care facility orientation prior to clinical experience.	3	2	1	N			
10.3	Demonstrate the use of pertinent safety precautions and aseptic techniques.	3	2	1	N			
10.4	Utilize proper communication, critical thinking, and problem-solving techniques.	3	2	1	N			
10.5	Demonstrate the safe and appropriate use of equipment and supplies.	3	2	1	N			
10.6	Perform skills safely and effectively as outlined in policy and procedures of the health care facility and standards of the health care profession.	3	2	1	N			

Standard 11.0 The student will relate respiratory care and procedures to the use of respiratory diagnostic equipment.

*One of these columns must be checked

Learning Expectations		Check the appropriate Mastery or Non-Mastery column*				Rating (Circle one)	Mastery	Non-Mastery
11.1	Analyze basic cardio/respiratory anatomy and physiology.	3	2	1	N			
11.2	Evaluate various respiratory procedures and the application for diagnostic equipment.	3	2	1	N			
11.3	Compare gas laws and their application to health care.	3	2	1	N			
11.4	Research the function, indication, and precautions of oxygen therapy devices.	3	2	1	N			
11.5	Describe safety precautions concerning medical gases and related storage systems (piping and cylinders).	3	2	1	N			
11.6	Put into practice healthcare worker CPR/First Aid skills.	3	2	1	N			

Additional Comments _____